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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,194	09/26/2003	Toshio Kimura	1035-471	4479
23117	7590 06/30/2004		EXAMINER	
NIXON & VANDERHYE, PC			VU, QUANG D	
8TH FLOOR	1100 N GLEBE ROAD 8TH FLOOR		ART UNIT	PAPER NUMBER
ARLINGTON	, VA 22201-4714		2811	

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/670,194	KIMURA ET AL.	
Office Action Summary	Examiner	Art Unit	(ريم
	Quang D Vu	2811	pro
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence add	lress
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).		imely filed  ays will be considered timely.  the mailing date of this conict (ISS) (ISS).	nmunication.
Status			
1) Responsive to communication(s) filed on	<u>_</u> .		
2a) This action is <b>FINAL</b> . 2b) Thi	s action is non-final.		
3) Since this application is in condition for allows closed in accordance with the practice under	•		merits is
Disposition of Claims			
4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-18 are subject to restriction and/or	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin			
10) The drawing(s) filed on is/are: a) ac			
Applicant may not request that any objection to the			D 4 404(4)
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E			* *
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	nts have been received.  Its have been received in Applica  Ority documents have been received in Applica  Ority documents have been received.	ition No ved in this National S	Stage
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summar	y (PTO-413)	
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [	Date	453)
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>	5) Notice of Informal 6) Other:	ratent Application (PTO-	·132)

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-10, drawn to a chip-stack semiconductor device, classified in class 257, subclass 777.
- II. Claims 11-18, drawn to a manufacturing method of a chip-stack semiconductor device, classified in class 438, subclass 107.

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the group I invention could be made by a materially different process. For example, selectivity forming the through electrode made of the conductive material linking a front surface to a back surface of the semiconductor chip to expose the conductive material, instead of forming the through electrode made of the conductive material linking a front surface to a back surface of the semiconductor chip by removing a back surface of the semiconductor chip partially in a thickness direction to expose the conductive material.

Because these inventions are distinct for the reasons give above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 2811

## **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D Vu whose telephone number is 571-272-1667. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qv June 28, 2004.

Primary Examiner
A-0, 2811